When ChatGPT Gives Incorrect Answers: The Impact of Inaccurate Information by Generative AI on Tourism Decision-Making

Abstract

This study investigates how inaccurate information provided by ChatGPT impacts travelers' acceptance of recommendations. Six experiments were conducted based on the accessibility-diagnosticity framework. These examined the moderating role of the prominence and type of incorrect information and their effects on decision-making. The results show that participants perceived more accuracy and trustworthiness, leading to stronger intentions to visit when incorrect information was absent. However, there was a decline in their intentions to visit when incorrect information was present and more prominent or in the same domain. This effect diminished when multiple domains were involved or when participants were focused on the initial task. The research highlights that both the prominence and type of incorrect information are boundary conditions and provides insights into AI applications in tourism. Furthermore, it offers practical implications for online travel agencies in terms of user interface and user experience design planning.